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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/559,619

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EXAMINER

PRICE, CRAIG JAMES

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/559,619	<b>Applicant(s)</b> MATSUZAWA ET AL.	
	<b>Examiner</b> Craig Price	<b>Art Unit</b> 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1 and 4-8 are pending.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6-8 are rejected under 35 U.S.C. 101 because the claim is directed to neither a "process" nor a "machine" but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. See MPEP 2173.05(p)[R-5].

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 4-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "the atmospheric side" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claims 6-8 are indefinite under 35 U.S.C. 112 second paragraph as reciting both an apparatus and method step in the claim. See MPEP 2173.05(p)[R-5].

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prokul (2,039,343) in view of Taillandier (6,354,348).

Prokul discloses, as shown in Figures 1-3, a valve for a safety tire, equipped with a charging opening for charging gas into an outer gas chamber and an inner gas chamber, which are provided in a tire having a double structure. The valve for a safety tire comprising, an air-supply passage (27) for an inner gas chamber (17), which causes the charging opening and the inner gas chamber to communicate with each other, and an air-supply passage (27) for an outer gas chamber (18), which causes the charging opening and the outer gas chamber to communicate with each other, and a non-return

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valve member (28) for an inner gas chamber, provided in the air-supply passage for an inner gas chamber, the non-return valve member for an inner gas chamber allowing gas to flow from the atmospheric side into the gas chamber and making it possible to prevent gas from flowing from the gas chamber into the atmosphere, and also allowing gas to flow from the gas chamber into the atmosphere by carrying out a predetermined operation (such as the operation of depressing pin 26), a non-return valve member (28) for an outer gas chamber, provided in the air-supply passage for an outer gas chamber, the non-return valve member for an outer gas chamber allowing gas to flow from the atmospheric side into the gas chamber and making it possible to prevent gas from flowing from the gas chamber into the atmosphere, and also allowing gas to flow from the gas chamber into the atmosphere by carrying out a predetermined operation (such as the operation of depressing pin 26). An engaging portion (the male threads of 24 engaging cap 32) that allows a filling adapter with a coupler to be mounted at the charging opening in only a fixed direction. A detachment- restraining means (38) for restraining detachment of the non-return valve member for an outer gas chamber is provided in the air-supply passage for an outer gas chamber at a position nearer to the charging opening than the non-return valve member for an outer gas chamber.

Firstly, Prokul is silent to having a filling adapter that includes a first passage that can supply gas to the inner gas chamber by communicating with the air-supply passage for an inner gas chamber, and includes a second passage that can supply gas to the outer gas chamber by communicating with the air-supply passage for an outer gas chamber so as to make a pressure difference between the outer gas chamber and the

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inner gas chamber, the engaging portion allowing the filling adapter to be mounted so that the air-supply passage for an inner gas chamber communicates with the first passage and the air-supply passage for an outer gas chamber communicates with the second passage.

Taillandier discloses a filling adapter (30) as shown in Figure 3, that includes a first passage (31) that can supply gas to the inner gas chamber by communicating with the air-supply passage for an inner gas chamber, and includes a second passage (32) that can supply gas to the outer gas chamber by communicating with the air-supply passage for an outer gas chamber so as to make a pressure difference between the outer gas chamber and the inner gas chamber, the engaging portion allowing the filling adapter to be mounted so that the air-supply passage for an inner gas chamber communicates with the first passage and the air-supply passage for an outer gas chamber communicates with the second passage.

Secondly, Regarding claim 4, Prokul is silent to having a filling adapter with a coupler, which engages with a valve for a safety tire so as to charge gas from a gas supply source into the outer gas chamber and into the inner gas chamber via the air-supply passage for an outer gas chamber and the air-supply passage for an inner gas chamber, the filling adapter comprising, a main body portion engaging with the valve for a safety tire, a second coupling provided in the main body portion and including a valve core connectable to a pressure source to allow gas from the pressure source to be supplied to the tire, an air chamber provided in the main body portion and connected to the second coupling, a first passage provided in the main body portion and causing the

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air chamber and the air-supply passage for an inner gas chamber to communicate with each other, a second passage provided in the main body portion and causing the air chamber and the air-supply passage for an outer gas chamber to communicate with each other, and differential pressure setting means provided in the second passage and distributing gas from the gas supply source to the first passage and the second passage so as to generate a pressure difference there between, and a first coupling connected to the second passage and allowing gas in the outer gas chamber to be released to the atmosphere by carrying out a predetermined operation.

Taillandier discloses that a filling adapter (30) with a coupler (66), which engages with a valve for a safety tire *so as to charge gas from a gas supply source into the outer gas chamber and into the inner gas chamber via the air-supply passage for an outer gas chamber and the air-supply passage for an inner gas chamber* (this limitation “for a safety tire...for an inner gas chamber” is considered as an intended use statement bearing no patentable weight), the filling adapter comprising, a main body portion (30) engaging with the valve for a safety tire, a second coupling (33) provided in the main body portion and including a valve core (36) connectable to a pressure source (through 34) to allow gas from the pressure source to be supplied to the tire, an air chamber (31) provided in the main body portion and connected to the second coupling, a first passage (15,31) provided in the main body portion and causing the air chamber and the air-supply passage for an inner gas chamber to communicate with each other, a second passage (32) provided in the main body portion and causing the air chamber and the air-supply passage for an outer gas chamber to communicate with each other, and

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differential pressure setting means (43, piston, Col.4, Lns. 10-15) provided in the second passage and distributing gas from the gas supply source to the first passage and the second passage so as to generate a pressure difference there between, and a first coupling (49,50) connected to the second passage and allowing gas in the outer gas chamber to be released to the atmosphere by carrying out a predetermined operation (such as the operation of removing 49 and 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a filling adaptor as taught by Taillandier with the body (23) of Prokul as one would have expected the filling adaptor to perform as equally as well and in order to verify the pressures in each chamber.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prokul (2,039,343) in view of Taillandier (6,354,348) as applied to claim 1 above, and further in view of Hawkes (3,422,836).

Regarding claim 5, Taillandier discloses a main body portion (30, see Figure 3) and operating means (the face of 30 near the openings of 15,27) of Taillandier engages with the valve of Prokul, which is capable of performing the causing of gas in the inner gas chamber and gas in the outer gas chamber to be released to the atmosphere so as not to expand the air pocket, by carrying out a predetermined operation (such as the connection of the device) with respect to the non-return valve member for an inner gas chamber and the non-return valve member for an outer gas chamber of the valve for a safety tire when the main body portion is engaged with the valve for a safety tire.



Prokul and Taillandier are silent to having a rim which forms an outer gas chamber between the pneumatic tire and the air pocket when the pneumatic tire and the air pocket are mounted.

Hawkes discloses a dual chambered tire which teaches the use of a rim (1) which forms an outer gas chamber between the pneumatic tire and the air pocket when the pneumatic tire and the air pocket are mounted.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a tire and rim system as taught by Hawkes with the tire and rim system of Prokul as one would have expected the device to perform as equally as well.

Regarding method claims 6 and 7, the device shown by Prokul in combination with Taillandier and Hawkes will perform the methods as recited in claims 6 and 7, during normal operational use of the device.

Regarding claim 8, Taillandier discloses in combination with Prokul and Hawkes that the pressure releasing method according to claim 7, wherein the operating means includes a first protruding portion for operating the non-return valve member for an inner gas chamber, and a second protruding portion for operating the non-return valve member for an outer gas chamber, and the first protruding portion (the protruding portion of 45 is longer than 49, as shown in Figure 3) is longer than the second protruding portion.

***Response to Arguments***

Applicant's arguments with respect to claims 1 and 4-8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571)272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP  
/C. P./  
Examiner, Art Unit 3753

14 January 2009

/John Rivell/  
Primary Examiner, Art Unit 3753